PTO/SB/01 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Attorney Docket Number DECLARATION FOR UTILITY OR First Named Inventor David H. Shen **DESIGN** COMPLETE IF KNOWN PATENT APPLICATION (37 CFR 1.63) Application Number base on 60/431,979 Filing Date 12/10/2002 Declaration Declaration • Submitted after Initial Submitted OR Art Unit Filing (surcharge With Initial (37 CFR 1.16 (e)) **Examiner Name** Filina required) I hereby declare that: Each inventor's residence, mailing address, and citizenship are as stated below next to their name. I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled: DAVID H. SHEN, U.S. CITIZEN, 21037 Dorsey Way, Saratoga, CA 95070 A PASSIVE SUBHARMONIC MIXER DESIGN (Title of the Invention) the specification of which 141 is attached hereto OR as United States Application Number or PCT International was filed on (MM/DD/YYYY) (if applicable). and was amended on (MM/DD/YYYY) Application Number I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed. Certified Copy Attached? **Priority Prior Foreign Application Foreign Filing Date Not Claimed** Yes Country (MM/DD/YYYY) Number(s)

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto. [Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## **DECLARATION** — Utility or Design Patent Application

Direct all correspondence to: Customer Number:					OR	V.	Corresp	ondence address below	
Name	<del></del>								
DAVID H. SHEN, IRF SEMICONDUC	TOR, INC.								
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I hereby declare that all statement and belief are believed to be statements and the like so mad false statements may jeopardize	true; and furl e are punishat	ther that t ble by fine	these state or impriso	ements onment,	wer , or b	re made ooth, und	e with i	the kno	wiedge that within raise
NAME OF SOLE OR FIRST IN	VENTOR:		An	etition h	าas b	een filed	I for this	<u>s unsian</u>	ned inventor
Given Name (first and middle [if any]) DAVID H.					Family Name or Sumame SHEN				
Inventor's Signature	H. Sh	<u></u>							Date 12/4/83
Residence: City	State			Coun	•			Citizer	nship
Saratoga	California			U.S.A.				U.S.A.	
Mailing Address 21037 Dorsey Way									
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Sartatoga	CA				9507	70			U.S.A.
NAME OF SECOND INVENTO	R:					<del> </del>		en filed f	for this unsigned inventor
Given Name (first and middle [if any])						Family N or Suma			
Inventor's Signature									Date
Residence: City	State			Cour	ntry			Citize	nship
Mailing Address				1				1	
City	State				ZIP		<del></del>	Count	try
Additional inventors or a legal re	presentative are be	eing named o	on the	supplem	ental s	sheet(s) PT	O/SB/02	A or 02LR	attached hereto.

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STATEMEN	T UNDER 37 CFR 3.73(b)
Applicant/Patent Owner: DAVID H. SHEN	
Application No./Patent No.: Based on Provisional Application	ation No. 60/431,979 Filed/Issue Date: 12/10/2002/New Filing
Entitled: A PASSIVE SUBHARMONIC MIXER DESIGN	·
IRF SEMICONDUCTOR, INC., a CORPORATION (Name of Assignee)	(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is: 1. $\mathbf{S}_{t}^{\mathbf{A}}$ the assignee of the entire right, title, and interest;	or
2. an assignee of less than the entire right, title and The extent (by percentage) of its ownership interes in the patent application/patent identified above by virtue	est is%
A. [N An assignment from the inventor(s) of the patent in the United States Patent and Trademark Office attached.	application/patent identified above. The assignment was recorded at Reel, Frame, or for which a copy thereof is
OR	
below:  1. From:  The document was recorded in the United	To: States Patent and Trademark Office at , or for which a copy thereof is attached.
2. From:     The document was recorded in the United	To: States Patent and Trademark Office at
	, or for which a copy thereof is attached.
3. From:  The document was recorded in the United Reel  [ ] Additional documents in the chain of title a	, or for which a copy thereof is attached.
[ ] Copies of assignments or other documents in the chell [NOTE: A separate copy (i.e., the original assignment by submitted to Assignment Division in accordance recorded in the records of the USPTO. See MPEP	ent document or a true copy of the original document) dance with 37 CFR Part 3, if the assignment is to be
The undersigned (whose title is supplied below) is author	
1214/2003	ANN P. SHEN
Date 40 & 77 7 80 90	Typed or printed name
Telephone number	Signature
•	CF-O
	Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Sample	Form	/former	PT	O/SB/	15)	(08-03)	
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ASSIGNMENT OF APPLICATION

Docket Number (Optional)

ASSIGNMENT OF APPLICATION
Whereas,I, DAVID H. SHEN of 21037 DORSEY WAY, SARATOGA, CALIFORNIA 95070, U.S.A., hereafter
referred to as applicant, have invented certain new and useful improvements in A PASSIVE SUBHARMONIC
MIXER DESIGN
for which an application for a United States Patent was filed on
Application Number
for which an application for a United States Patent was executed on 12/4/03, and
Whereas, IRF SEMICONDUCTOR, INC. of ISLAND of GRAND CAYMAN, CAYMAN ISLANDS here referred
to "assignee" whose mailing address is 6 RESULTS WAY, CUPERTINO, CALIFORNIA, U.S.A is
desirous of acquiring the entire right, title and interest in the same;
Now, therefore, in consideration of the sum of ZERO dollars (\$ 0.00), the receipt whereof is acknowledge, and other good and valuable consideration, I/We, the applicant(s), by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire rights, title and interest in and to any and all Patents which may be granted therefore in the United States. I/We hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.  Executed this
Doud A La
Signature  Signature  David H. Shen  Printed Name/Registration No., if applicable  Before me personally appeared said David H. Shen
and acknowledged the foregoing instrument to be his free act and deed this
RACHEL MURILLO
Seal Rackel Multi- Notary Public - California  Santa Clara County My Comm. Expires Feb 1, 2006
Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, See below*.